

GBP2 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20488c**Specification**

GBP2 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	P32456
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	67209
Antigen Region	192-220

GBP2 Antibody (Center) - Additional Information**Gene ID** 2634**Other Names**

Interferon-induced guanylate-binding protein 2, GTP-binding protein 2, GBP-2, HuGBP-2, Guanine nucleotide-binding protein 2, GBP2

Target/Specificity

This GBP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 192-220 amino acids from the Central region of human GBP2.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GBP2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

GBP2 Antibody (Center) - Protein Information**Name** GBP2 {ECO:0000303|PubMed:8706832, ECO:0000312|HGNC:HGNC:4183}**Function** Interferon (IFN)-inducible GTPase that plays important roles in innate immunity against

a diverse range of bacterial, viral and protozoan pathogens (PubMed:[31091448](#)). Hydrolyzes GTP to GMP in 2 consecutive cleavage reactions, but the major reaction product is GDP (PubMed:[8706832](#)). Following infection, recruited to the pathogen- containing vacuoles or vacuole-escaped bacteria and acts as a positive regulator of inflammasome assembly by promoting the release of inflammasome ligands from bacteria (By similarity). Acts by promoting lysis of pathogen-containing vacuoles, releasing pathogens into the cytosol (By similarity). Following pathogen release in the cytosol, promotes recruitment of proteins that mediate bacterial cytolysis: this liberates ligands that are detected by inflammasomes, such as lipopolysaccharide (LPS) that activates the non-canonical CASP4/CASP11 inflammasome or double-stranded DNA (dsDNA) that activates the AIM2 inflammasome (By similarity). Confers protection to the protozoan pathogen *Toxoplasma gondii* (By similarity). Independently of its GTPase activity, acts as an inhibitor of various viruses infectivity, such as HIV-1, Zika and influenza A viruses, by inhibiting FURIN-mediated maturation of viral envelope proteins (PubMed:[31091448](#)).

Cellular Location

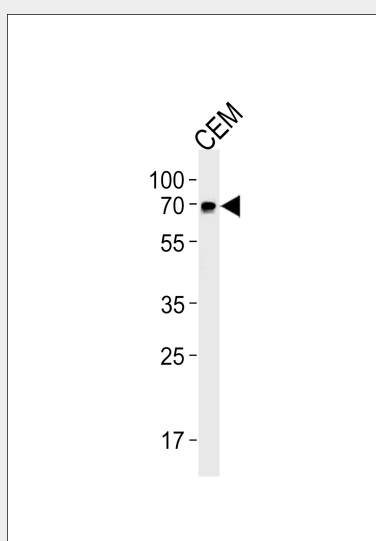
Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:Q9Z0E6}; Lipid-anchor. Golgi apparatus membrane; Lipid- anchor. Cytoplasm. Cytoplasm, perinuclear region. Note=GBP2-GBP5 dimers localize to the Golgi apparatus.

GBP2 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GBP2 Antibody (Center) - Images



GBP2 Antibody (Center) (Cat. #AP20488c) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the GBP2 antibody detected the GBP2 protein (arrow).

GBP2 Antibody (Center) - Background

Binds GTP, GDP and GMP. Hydrolyzes GTP very efficiently; GDP rather than GMP is the major reaction product.

GBP2 Antibody (Center) - References

Cheng Y.-S.E., et al. Mol. Cell. Biol. 11:4717-4725(1991).

Schwemmle M., et al. Submitted (SEP-1991) to the EMBL/GenBank/DDBJ databases.

Bechtel S., et al. BMC Genomics 8:399-399(2007).

Ota T., et al. Nat. Genet. 36:40-45(2004).

Ebert L., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.